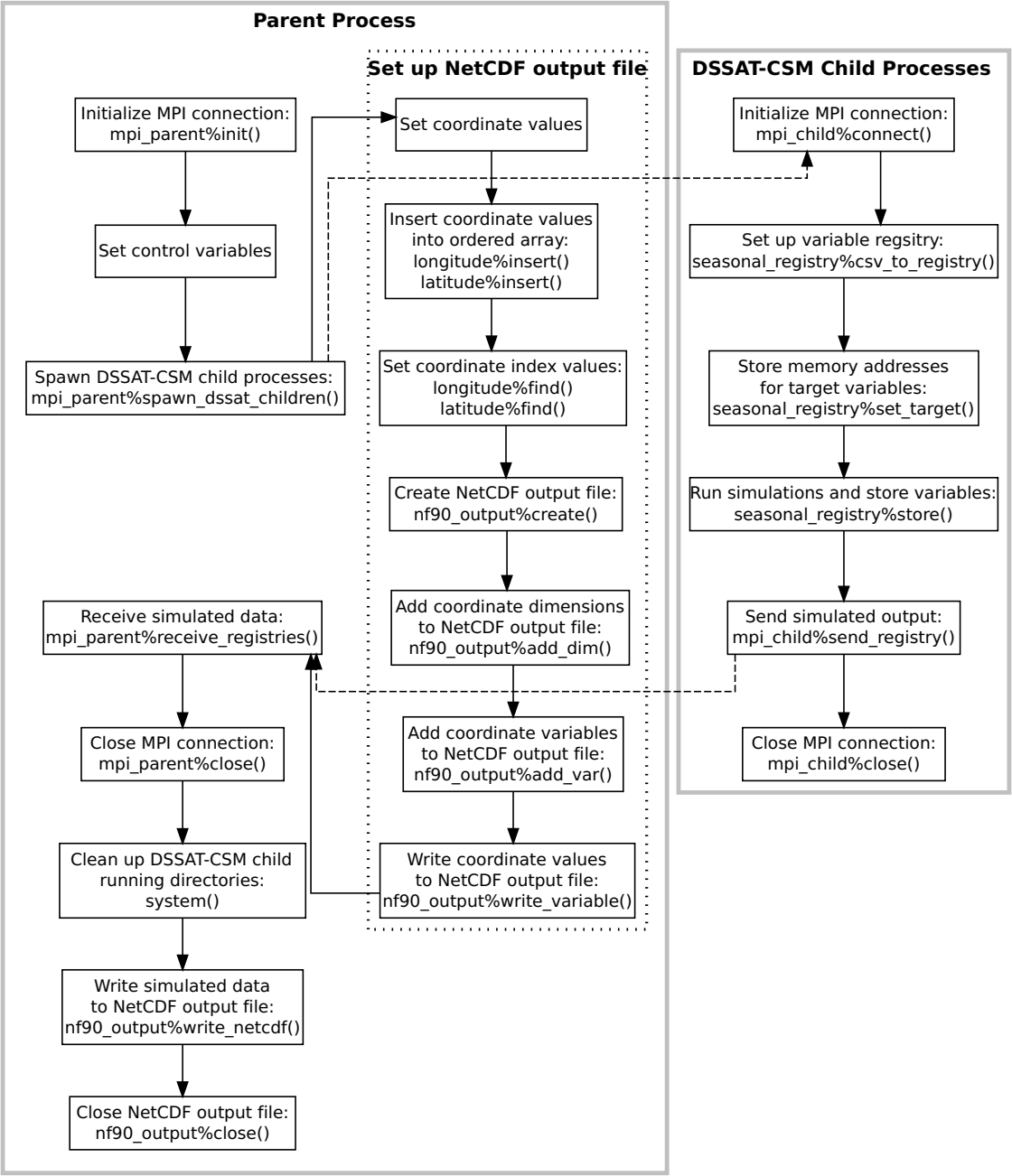
Parent Process
Set up NetCDF output file
DSSAT-CSM Child Processes
Initialize MPI connection: mpi_parent%init()
Set control variables
Spawn DSSAT-CSM child processes: mpi_parent%spawn_dssat_children()
Set coordinate values
Insert coordinate values into ordered array: longitude%insert() latitude%insert()
Set coordinate index values: longitude%find() latitude%find()
Create NetCDF output file: nf90_output%create()
Add coordinate dimensions to NetCDF output file: nf90_output%add_dim()
Add coordinate variables to NetCDF output file: nf90_output%add_var()
Write coordinate values to NetCDF output file: nf90_output%write_variable()
Initialize MPI connection: mpi_child%connect()
Set up variable regsitry: seasonal_registry%csv_to_registry()
Store memory addresses for target variables: seasonal_registry%set_target()
Run simulations and store variables: seasonal_registry%store()
Send simulated output: mpi_child%send_registry()
Close MPI connection: mpi_child%close()
Receive simulated data: mpi_parent%receive_registries()
Close MPI connection: mpi_parent%close()
Clean up DSSAT-CSM child running directories: system()
Write simulated data to NetCDF output file: nf90_output%write_netcdf()
Close NetCDF output file: nf90_output%close()